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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)			EXAMINER	
CIRA CENTRE, 12TH FLOOR			CHAI, LONGBIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/693,407

Applicant(s)

ROBERTS ET AL.

Examiner

Longbit Chai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Currently pending claims are 1 – 40.

Response to Arguments

2. Applicant's arguments with respect to the subject matter of the instant claims have been fully considered but are not persuasive.

3. As each of independent claims, Applicant asserts "Boebert's use of logical switches to determine the destination of data is not dependent on the user input. Therefore, Boebert does not disclose or anticipate determining whether input is intended for a secure computing environment based on the input" (Remarks; Page 14, 2nd Para). Examiner respectfully disagrees because Boebert teaches the user invokes trusted path mode, the trusted window can be displayed and the user could review the revised document to verify that no additional information had been attached to the file (Boebert: Column 9 Line 53 – 65) and as such a secure computing environment is indeed determined based upon the user input.

4. As per claim 27, Applicant asserts "Boebert does not disclose or anticipate accepting output from a specific source entity in a secured execution environment and securely transferring the output to an output device" (Remarks; Page 15, 1st Para). Examiner respectfully disagrees because Boebert teaches the user invokes trusted path mode, the trusted window can be displayed and the user could review the revised document to verify that no additional information had been attached to the file (Boebert:

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Column 9 Line 53 – 65); where (a) the trust path mode of operation environment invoked by a user is qualified as a specific source entity in a secured execution environment and (b) display the data on a trusted window, as taught by Boebert, can be considered as securely transferring the output to an output device and a device is secured or not secured (i.e. trusted device or un-trusted device) is characterized by its secured or unsecured operation environment. Therefore, Applicant's arguments are respectfully traversed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Boebert et al. (U.S. Patent 5,822,435).

As per claim 1 and 14, Boebert teaches a method for providing a secure user interface to a secured execution environment on a system (Boebert : Figure 4) comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

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accepting user input from a user input device (Boebert : Figure 2 / Element 20 and Column 3 Line 25 – 26);

determining, based on said user input, whether said user input is intended for said secured execution environment (Boebert : Column 9 Line 53 – 65, Column 5 Line 27 and Column 6 Line 26 – 29: the user invokes the trusted path mode is considered as determining, based on said user input, to request for a secured execution environment).

if said user input is not intended for said secured execution environment, transferring said user input to said second execution environment (Boebert : Column 5 Line 44 – 46 / Line 18 – 24 and Figure 4 / Element 34 & 36: (a) in trusted path mode, keyboard manager intercepts keyboard data intended for workstation and the data is then routed to cryptographic entity (b) in normal mode, logical switches are in the UP position, connecting workstation processor directly to keyboard and display and thus permits the free transfer of information from keyboard to workstation and from workstation to display).

As per claim 27, Boebert teaches a trusted user interface engine (Boebert : Figure 4 / Element 30) for providing a secure user interface to a secured execution environment on a system comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

an input trusted service provider accepting user input from a user input device, operably connected to said user device (Boebert : Column 6 Line 26 – 29: trusted path subsystem is considered as an input trusted service provider);

a trusted input manager for determining, based on said user input, whether said user input is intended for said secured execution environment (Boebert : Column 9 Line 53 – 65, Column 6 Line 26 – 29 and Column 5 Line 27: (a) the user invokes the trusted path mode is considered as determining, based on said user input, to request for a secured execution environment and (b) the trusted path subsystem is considered as an trusted input manager and the user invokes the trusted path mode is considered as intended for said secured execution environment) and, if said user input is not intended for said secured execution environment, transferring said user input to said second execution environment (Boebert : Column 5 Line 44 – 46 / Line 18 – 24 and Figure 4 / Element 34 & 36: (a) in trusted path mode, keyboard manager intercepts keyboard data intended for workstation and the data is then routed to cryptographic entity (b) in normal mode, logical switches are in the UP position, connecting workstation processor directly to keyboard and display and thus permits the free transfer of information from keyboard to workstation and from workstation to display).

As per claim 11 and 24, Boebert teaches a method for providing a secure user interface to a secured execution environment on a system (Boebert : Figure 4) comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

accepting output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment); and

securely transferring said output to an output device (Boebert : Column 8 Line 57 – 63 and Column 9 Line 53 – 65: (a) in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window and (b) display the data on a trusted window, as taught by Boebert, can be considered as securely transferring the output to an output device).

As per claim 37, Boebert teaches a trusted user interface engine (Boebert : Figure 4 / Element 30) for providing a secure user interface to a secured execution environment on a system comprising said secured execution environment and an second execution environment (Boebert : Figure 2 / Element 63 & 69 and Column 4 Line 51 – 53), comprising:

a trusted output manager that accepts output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment and a video manager used in a trusted path mode is qualified as a trusted output manager); and that

securely transfers said output to an output device (Boebert : Column 8 Line 57 – 63 and Column 9 Line 53 – 65: (a) in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted

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window and (b) (b) display the data on a trusted window, as taught by Boebert, can be considered as securely transferring the output to an output device).

As per claim 2, 15 and 28, Boebert teaches said step of accepting user input from a user input device comprises decrypting said user input (Boebert : Column 3 Line 26 – 30).

As per claim 3, 16 and 29, Boebert teaches establishing a secure communications channel with said user input (Boebert : Column 3 Line 26 – 30: the user input is encrypted first).

As per claim 4, 17 and 30, Boebert teaches verifying said user input (Boebert : Column 6 Line 26 – 29).

As per claim 5, 18 and 31, Boebert teaches if said user input is intended for said secured execution environment, determining a specific destination entity in said secured execution environment for said user input; and transferring said user input to said specific destination entity (Boebert : Column 5 Line 27 / Line 44 – 46 and Column 8 Line 57 – 63).

As per claim 6, 19, Boebert teaches providing window management functionality for managing at least one graphical user interface element owned by said specific

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destination entity (Boebert : Column 6 Line 53 – 59 and Column 8 Line 57 – 63); and determining that said user input relates to said graphical user interface element (Boebert : Column Column 8 Line 60 – 63 and Figure 6 / Element 82).

As per claim 7, 20 and 33, Boebert teaches interpreting said user input (Boebert : Column 6 Line 26 – 29 and Column 5 Line 27).

As per claim 8, 21 and 34, Boebert teaches accepting output from a specific source entity in said secured execution environment (Boebert : Column 8 Line 45 – 50: a trusted path mode is considered as a secured execution environment); and securely transferring said output to an output device (Boebert : Column 8 Line 57 – 63: in a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 9, 12, 22, 25, 35 and 38, Boebert teaches encrypting said data portion of said output (Boebert : Column 3 Line 26 – 28: data trabsferrde from an output device is encrypted first).

As per claim 10, 13, 23, 26, 36 and 39, Boebert teaches transferring said output to a curtained memory (Boebert : Column 8 Line 57 – 63: a curtained memory is interpreted as a protected memory area. In a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

As per claim 32, Boebert teaches a trusted window manager that provides window management functionality for managing at least one graphical user interface element owned by said specific destination entity (Boebert : Column 6 Line 53 – 59 and Column 8 Line 57 – 63 & Figure 6 / Element 82: a trusted window is owned by a specific destination entity); and where said trusted input manager determines that said user input relates to said graphical user interface element (Boebert : Column 6 Line 26 – 26 / Line 44 – 59 and Column 8 Line 57 – 63 & Figure 6 / Element 82).

As per claim 40, Boebert teaches a trusted rendering interface providing rendering said output from said specific source entity (Boebert : Column 8 Line 48 – 63: a trusted video manager and a trusted window for a specific user screen display); and where said secure transfer is a transfer of said rendered output (Boebert : Column 8 Line 57 – 63: a curtained memory is interpreted as a protected memory area. In a secure mode, an output is transferred and stored in to a video RAM, which is not used in a normal mode and outputted to a trusted window).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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